Atty Dkt. No.:SHIM007 USSN: 09/608,713

AMENDMENTS TO THE CLAIMS

Please amend claim 33, and add new claims 37 and 38, as shown below. A complete set of the claims, including their current status, is provided below.

6

1-18. (Cancelled)

19-29. (Withdrawn)

30. **(Previously amended)** A method for identifying a HCV polymerase inhibitor, said method comprising:

determining the complementarity of a test compound with an active site and/or RNA binding cleft of a polypeptide using a three-dimensional structural coordinate of said polypeptide or its part and a three-dimensional structural coordinate of said test compound,

wherein said polypeptide is derived from an NS5B HCV polymerase, has an NS5B HCV polymerase activity, and consists of an amino acid sequence X-Y, wherein X is a consecutive amino acid sequence which is a portion of NS5B, the N-terminal amino acid of X is a serine residue corresponding to amino acid residue 1 of NS5B, and the C-terminal amino acid residue of X is any one of amino acid residues 531(Lys) to 570 (Arg) of NS5B; and wherein Y is a carboxyl group or an amino acid sequence which is not derived from NS5B; and wherein one or more amino acids in X may be modified, and wherein methionine residues in the amino acid sequence of X may be replaced by selenomethionine residues,

wherein a test compound that is complementary to said active site and/or RNA binding cleft of said polypeptide is a HCV polymerase inhibitor.

- 31. **(Previously amended)** A method for identifying a HCV polymerase inhibitor, which method comprises the steps of:
 - (a) performing the method of claim 30; and
 - (b) determining a HCV polymerase-inhibitory activity of said HCV polymerase inhibitor.

Atty Dkt. No.:SHIM007 USSN: 09/608,713

32. (Withdrawn)

- 33. (Currently amended) A method for identifying a HCV polymerase inhibitor, which method comprises the steps of:
- (a) obtaining a polypeptide which is derived from an NS5B HCV polymerase, has an NS5B HCV polymerase activity, and consists of the amino acid sequence X'-Y, wherein X' is a consecutive amino acid sequence which is a portion of the NS5B, the N-terminal amino acid of X' is a serine residue corresponding to amino acid residue 1 of NS5B, and the C-terminal amino acid residue of X' is any one of amino acid residues 531 (Lys) to 544 (Gln) of NS5B; and wherein Y is a carboxyl group or another amino acid sequence which is not derived from NS5B; and wherein one or more amino acids in X' may be modified, and methionine residues in the amino acid sequence of X' may be replaced by selenomethionine residues:
- (b) determining the HCV polymerase activity of said polypeptide by reacting said polypeptide obtained in step (a) with a template RNA and substrates in the presence of a test compound;
- (c) determining the HCV polymerase activity of said polypeptide by reacting polypeptide obtained in step (a) with a template RNA and substrates in the absence of said test compound; and,
- (d) comparing the HCV polymerase activity determined in step (b) with the HCV polymerase activity determined in step (c);

wherein an activity determined in step (b) that is lower than the HCV polymerase activity determined in step (e) indicates that the test agent is an HCV polymerase inhibitor.

34-36. (Withdrawn)

- 37. (New) The method according to claim 31, wherein the C-terminal amino acid residue of X is selected from the group consisting of amino acid residues 531 to 544 and 570 of NS5B.
- 38. (New) The method according to claim 31, wherein the C-terminal amino acid residue of X is selected from the group consisting of amino acid residues 531, 536, 544 and 570 of NS5B.

Atty Dkt. No.:SHIM007 USSN: 09/608,713

39. (New) The method according to claim 33, wherein the C-terminal amino acid residue of X' is selected from the group consisting of amino acid residues 531, 536, and 544 of NS5B.